

RF Exposure Statement

1. LIMITS

According to §1.1310 and §2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

| Frequency range (MHz) | Electric field Strength (V/m) | Magnetic field Strength (A/m) | Power density (mW/cm ²) | Averaging time (minutes) |
|-----------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| 0.3 - 1.34..... | 614 | 1.63 | *(100) | 30 |
| 1.34 - 30..... | 824/f | 2.19/f | *(180/ f ²) | 30 |
| 30 - 300..... | 27.5 | 0.073 | 0.2 | 30 |
| 300 - 1500..... | | | f/1500 | 30 |
| 1500 - 100.000..... | | | 1.0 | 30 |

F = frequency in MHz

* = Plane-wave equivalent power density

2. MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

S = Power density

P = power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

2-1. 5MHz Bandwidth

| | |
|---|---------|
| Max Peak output Power at antenna input terminal (dBm) | 23.410 |
| Max Peak output Power at antenna input terminal (mW) | 219.280 |
| Prediction distance (cm) | 20.000 |
| Prediction frequency (MHz) | 2687.5 |
| Antenna Gain(typical) (dBi) | 0.000 |
| Antenna Gain(numeric) | 1.0000 |
| Power density at prediction frequency (mW/cm ²) | 0.04362 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

2-2. PCS Bandwidth

| | |
|---|---------|
| Max Peak output Power at antenna input terminal (dBm) | 23.11 |
| Max Peak output Power at antenna input terminal (mW) | 204.644 |
| Prediction distance (cm) | 20.000 |
| Prediction frequency (MHz) | 2685.00 |
| Antenna Gain(typical) (dBi) | 0.0000 |
| Antenna Gain(numeric) | 1.0000 |
| Power density at prediction frequency (mW/cm ²) | 0.04071 |
| MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²) | 1.00000 |

3. RESULTS

The power density level at 20 cm is 0.04362 mW/cm², which is below the uncontrolled exposure limit of 1.00000 mW/cm² at 2687.500 MHz for 5 MHz band. The power density level at 20 cm is 0.04071 mW/cm², which is below the uncontrolled exposure limit of 1.00000 mW/cm² at 2685.0 MHz for 10MHz band.